

# Exception Handling

09 February 2025 11:14

## What is Exception Handling?

- An **exception** is an **unexpected event** or error that occurs during the execution of a program, which disrupts the normal flow of instructions.
- **Exception Handling** is a way to handle such errors gracefully without crashing the program.

Ex with program : print sysout 10 times and in the 5th position I will do sysout(100/0)...

## Why is Exception Handling Important?

Imagine you're using an **online banking app**, and the app crashes every time you enter invalid input (e.g., letters instead of numbers for the account balance).

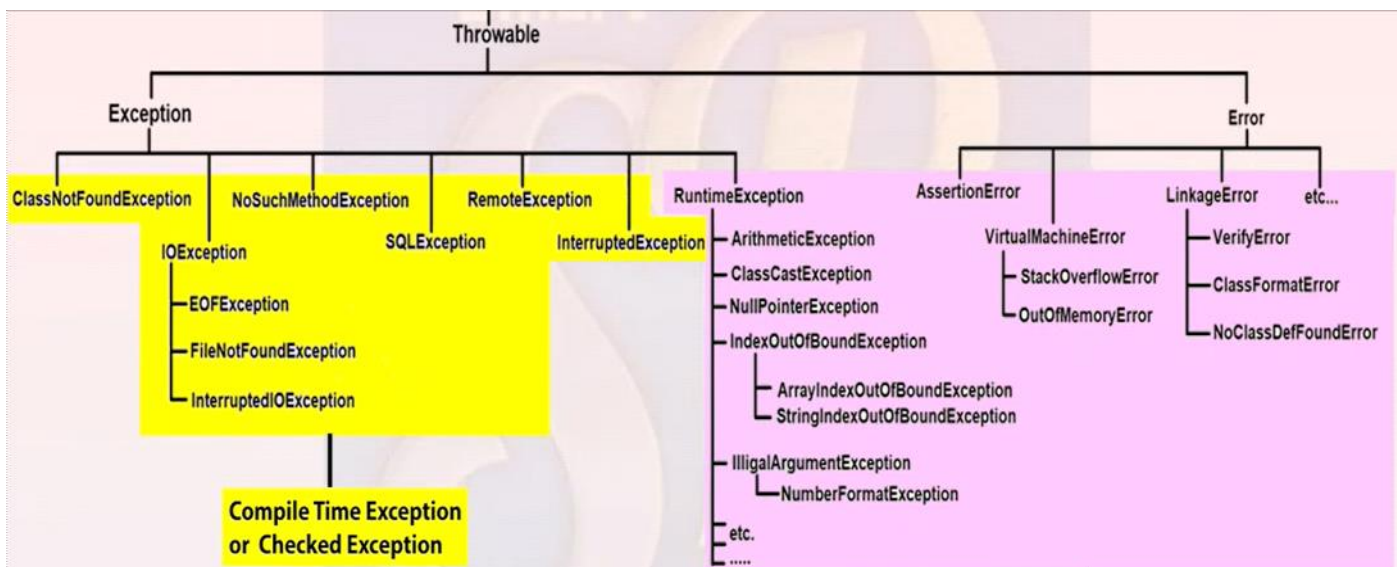
- With exception handling, the app can show a meaningful message like "Invalid input. Please enter a valid amount." instead of crashing.

➤ Exception Hierarchy:

1. Object class -> is the parent class of all the classes .
2. Throwable is the parent class of the exception and error class.

Q. Diff b/w Exception and error ?

| Exception   | Error   |
|---|---|
| 1. Exception occurs because of our programs   | 1. Error occurs because of lack of system resources.  |
| 2. Exceptions are recoverable i.e. programmer can handle them using try-catch block   | 2. Errors are not recoverable i.e. programmer can handle them to their level  |
| 3. Exceptions are of two types : <ul style="list-style-type: none"><li>▪ Compile Time Exceptions or Checked Exceptions</li><li>▪ Runtime Exceptions or Unchecked Exceptions</li></ul> | 3. Errors are only of one type : <ul style="list-style-type: none"><li>▪ Runtime Exceptions or Unchecked Exceptions</li></ul> |



Compile Time Exception  
or Checked Exception

NumberFormatException  
etc.  
.....

Runtime Exceptions or